



SEQUENCE LISTING

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TANIAI, Madoka
KURIMOTO, Masashi

<120> INTERLEUKIN-18-BINDING PROTEIN

<130> TORIGOE=4

<140> 09/786,130

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<151> 1998-11-18

<150> JP 247,588/98

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<151> 1998-11-18

<160> 72

<170> PatentIn version 3.0

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<212> PRT

<213> Homo sapiens

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Thr Pro Val Ser Gln Thr Thr Thr Ala Ala Thr Ala Ser Val Arg Ser
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Thr Lys Asp Pro Cys Pro Ser Gln Pro Pro Val Phe Pro Ala Ala Lys
20 25 30

Gln Cys Pro Ala Leu Glu Val Thr Trp Pro Glu Val Glu Val Pro Leu
35 40 45

Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys Ser Arg Phe Pro Asn
50 55 60

Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu
65 70 75 80

Pro Gly Arg Leu Trp Glu Gly Ser Thr Ser Arg Glu Arg Gly Ser Thr
85 90 95

Gly Thr Gln Leu Cys Lys Ala Leu Val Leu Glu Gln Leu Thr Pro Ala
100 105 110

Leu His Ser Thr Asn Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val
115 120 125

Val Gln Arg His Val Val Leu Ala Gln Leu Trp Ala Gly Leu Arg Ala

130

135

140

Thr Leu Pro Pro Thr Gln Glu Ala Leu Pro Ser Ser His Ser Ser Pro
 145 150 155 160

Gln Gln Gln Gly

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Thr Ser Ala Pro Gln Thr Thr Ala Thr Val Leu Thr Gly Ser Ser Lys
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Asp Pro Cys Ser Ser Trp Ser Pro Ala Val Pro Thr Lys Gln Tyr Pro
 20 25 30

Ala Leu Asp Val Ile Trp Pro Glu Lys Glu Val Pro Leu Asn Gly Thr
 35 40 45

Leu Thr Leu Ser Cys Thr Ala Cys Ser Arg Phe Pro Tyr Phe Ser Ile
 50 55 60

Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu Pro Gly Arg
 65 70 75 80

Leu Lys Glu Gly His Thr Ser Arg Glu His Arg Asn Thr Ser Thr Trp
 85 90 95

Leu His Arg Ala Leu Val Leu Glu Glu Leu Ser Pro Thr Leu Arg Ser
 100 105 110

Thr Asn Phe Ser Cys Leu Phe Val Asp Pro Gly Gln Val Ala Gln Tyr
 115 120 125

His Ile Ile Leu Ala Gln Leu Trp Asp Gly Leu Lys Thr Ala Pro Ser
 130 135 140

Pro Ser Gln Glu Thr Leu Ser Ser His Ser Pro Val Ser Arg Ser Ala
 145 150 155 160

Gly Pro Gly Val Ala
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Thr Pro Val Ser Gln Xaa Xaa Xaa Ala Ala Xaa Ala Xaa Val Arg Xaa
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Xaa Lys Asp Pro Cys Pro
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 <212> PRT
 <213> Homo sapiens

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Gly Ser Thr Gly Thr Gln Leu Cys Lys
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<210> 5
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 <213> Homo sapiens

<400> 5

Glu Arg Gly Ser Thr Gly Thr Gln Leu Cys Lys
 1 5 10

<210> 6
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<400> 6

Leu Trp Glu Gly Ser Thr Ser Arg
 1 5

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Thr	Pro	Val	Ser	Gln	Xaa	Xaa	Xaa	Ala	Ala	Xaa	Ala	Xaa	Val	Arg
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<400> 8

His	Val	Val	Leu	Ala	Gln	Leu	Trp	Ala	Gly	Leu	Arg	Ala	Xaa	Leu	Pro
1				5					10						15

Xaa	Xaa	Gln	Glu	Ala	Leu	Pro
			20			

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 1 5 10 15

Xaa Xaa Val Leu Val Asp Pro Glu Gln Val Val Gln Arg
 20 25

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 1 5 10

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 <212> PRT
 <213> Homo sapiens

<400> 12

Trp Glu Gly Ser Thr Ser Arg
 1 5

<210> 13
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 13

Leu Val Asp Pro Glu Gln
 1 5

<210> 14
<211> 7
<212> PRT
<213> Homo sapiens

<400> 14

Ile Glu His Leu Pro Gly Arg
1 5

<210> 15
<211> 4
<212> PRT
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<400> 15

His Val Val Leu
1

<210> 16
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<400> 16

Glu Gln Leu Thr Pro Ala Leu
1 5

<210> 17
<211> 8
<212> PRT
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<400> 17

Ile Glu His Leu Pro Gly Arg Leu
1 5

<210> 18
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<400> 18

Tyr Xaa Leu Gly Xaa Gly
1 5

<210> 19
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<212> PRT
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<400> 19

Phe Pro Asn Phe
1

<210> 20
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Tyr Xaa Leu Gly Xaa Gly Xaa Phe
1 5

<210> 21
<211> 7
<212> PRT
<213> Homo sapiens

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<400> 21

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1 5

<210> 22
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<213> Homo sapiens
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<220>
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 <222> (7)
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<400> 22

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<400> 23

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<210> 24
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<400> 24

Leu Lys Glu Gly His Thr Ser Arg
 1 5

<210> 25
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 <213> Mus musculus

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 1 5 10

<210> 26
 <211> 10
 <212> PRT
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<400> 26

Glu His Arg Xaa Thr Ser Thr Xaa Leu His
 1 5 10

<210> 27
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 <212> PRT
 <213> Mus musculus

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<400> 27

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Ala Val Pro Thr Lys
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<210> 28
 <211> 12
 <212> PRT
 <213> Mus musculus

<400> 28

Ala Leu Val Leu Glu Glu Leu Ser Pro Thr Leu Arg
 1 5 10

<210> 29
 <211> 7
 <212> PRT
 <213> Mus musculus

<400> 29

Ile Glu His Leu Pro Gly Arg
 1 5

<210> 30
 <211> 6
 <212> PRT
 <213> Mus musculus

<220>
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<400> 30

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<210> 31
 <211> 4
 <212> PRT
 <213> Mus musculus

<400> 31

His Ile Ile Leu
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<210> 32
 <211> 492
 <212> DNA
 <213> Homo sapiens

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 <222> (1)..(492)

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1				5				10					15			

aca	aag	gac	ccc	tgc	ccc	tcc	cag	ccc	cca	gtg	ttc	cca	gca	gct	aag	96
Thr	Lys	Asp	Pro	Cys	Pro	Ser	Gln	Pro	Pro	Val	Phe	Pro	Ala	Ala	Lys	
			20					25					30			

cag	tgt	cca	gca	ttg	gaa	gtg	acc	tgg	cca	gag	gtg	gaa	gtg	cca	ctg	144
Gln	Cys	Pro	Ala	Leu	Glu	Val	Thr	Trp	Pro	Glu	Val	Glu	Val	Pro	Leu	
			35				40					45				

aat gga acg ctg agc tta tcc tgt gtg gcc tgc agc cgc ttc ccc aac	192
Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys Ser Arg Phe Pro Asn	
50 55 60	
ttc agc atc ctc tac tgg ctg ggc aat ggt tcc ttc att gag cac ctc	240
Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu	
65 70 75 80	
cca ggc cga ctg tgg gag ggg agc acc agc cgg gaa cgt ggg agc aca	288
Pro Gly Arg Leu Trp Glu Gly Ser Thr Ser Arg Glu Arg Gly Ser Thr	
85 90 95	
ggt acg cag ctg tgc aag gcc ttg gtg ctg gag cag ctg acc cct gcc	336
Gly Thr Gln Leu Cys Lys Ala Leu Val Leu Glu Gln Leu Thr Pro Ala	
100 105 110	
ctg cac agc acc aac ttc tcc tgt gtg ctc gtg gac cct gaa cag gtt	384
Leu His Ser Thr Asn Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val	
115 120 125	
gtc cag cgt cac gtc gtc ctg gcc cag ctc tgg gct ggg ctg agg gca	432
Val Gln Arg His Val Val Leu Ala Gln Leu Trp Ala Gly Leu Arg Ala	
130 135 140	
acc ttg ccc ccc acc caa gaa gcc ctg ccc tcc agc cac agc agt cca	480
Thr Leu Pro Pro Thr Gln Glu Ala Leu Pro Ser Ser His Ser Ser Pro	
145 150 155 160	
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Gln Gln Gln Gly	
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1 5 10 15	
gac cca tgc tct tcc tgg tct cca gca gtc cca act aag cag tac cca	96
Asp Pro Cys Ser Ser Trp Ser Pro Ala Val Pro Thr Lys Gln Tyr Pro	
20 25 30	
gca ctg gat gtg att tgg cca gaa aaa gaa gtg cca ctg aat gga act	144
Ala Leu Asp Val Ile Trp Pro Glu Lys Glu Val Pro Leu Asn Gly Thr	
35 40 45	
ctg acc ttg tcc tgt act gcc tgc agc cgc ttc ccc tac ttc agc atc	192
Leu Thr Leu Ser Cys Thr Ala Cys Ser Arg Phe Pro Tyr Phe Ser Ile	

50	55	60	
ctc tac tgg ctg ggc aat ggt tcc ttc att gag cac ctt cca ggc cgg			240
Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu Pro Gly Arg			
65	70	75	80
ctg aag gag ggc cac aca agt cgc gag cac agg aac aca agc acc tgg			288
Leu Lys Glu Gly His Thr Ser Arg Glu His Arg Asn Thr Ser Thr Trp			
	85	90	95
ctg cac agg gcc ttg gtg ctg gaa gaa ctg agc ccc acc cta cga agt			336
Leu His Arg Ala Leu Val Leu Glu Glu Leu Ser Pro Thr Leu Arg Ser			
	100	105	110
acc aac ttc tcc tgt ttg ttt gtg gat cct gga caa gtg gcc cag tat			384
Thr Asn Phe Ser Cys Leu Phe Val Asp Pro Gly Gln Val Ala Gln Tyr			
	115	120	125
cac atc att ctg gcc cag ctc tgg gat ggg ttg aag aca gct ccg tcc			432
His Ile Ile Leu Ala Gln Leu Trp Asp Gly Leu Lys Thr Ala Pro Ser			
	130	135	140
cct tct caa gaa acc ctc tct agc cac agc cca gta tcc aga tca gca			480
Pro Ser Gln Glu Thr Leu Ser Ser His Ser Pro Val Ser Arg Ser Ala			
	145	150	155
ggc cca ggg gtt gca			495
Gly Pro Gly Val Ala			
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Thr Pro Val Ser Gln Thr Thr Thr Ala Ala Thr Ala Ser Val Arg Ser			
1	5	10	15
aca aag gac ccc tgc ccc tcc cag ccc cca gtg ttc cca gca gct aag			96
Thr Lys Asp Pro Cys Pro Ser Gln Pro Pro Val Phe Pro Ala Ala Lys			
	20	25	30
cag tgt cca gca ttg gaa gtg acc tgg cca gag gtg gaa gtg cca ctg			144
Gln Cys Pro Ala Leu Glu Val Thr Trp Pro Glu Val Glu Val Pro Leu			
	35	40	45
aat gga acg ctg agc tta tcc tgt gtg gcc tgc agc cgc ttc ccc aac			192
Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys Ser Arg Phe Pro Asn			
	50	55	60
ttc agc atc ctc tac tgg ctg ggc aat ggt tcc ttc att gag cac ctc			240

Phe	Ser	Ile	Leu	Tyr	Trp	Leu	Gly	Asn	Gly	Ser	Phe	Ile	Glu	His	Leu		
65					70					75					80		
cca	ggc	cga	ctg	tgg	gag	ggg	agc	acc	agc	cgg	gaa	cgt	ggg	agc	aca		288
Pro	Gly	Arg	Leu	Trp	Glu	Gly	Ser	Thr	Ser	Arg	Glu	Arg	Gly	Ser	Thr		
				85					90					95			
ggt	acg	cag	ctg	tgc	aag	gcc	ttg	gtg	ctg	gag	cag	ctg	acc	cct	gcc		336
Gly	Thr	Gln	Leu	Cys	Lys	Ala	Leu	Val	Leu	Glu	Gln	Leu	Thr	Pro	Ala		
			100					105					110				
ctg	cac	agc	acc	aac	ttc	tcc	tgt	gtg	ctc	gtg	gac	cct	gaa	cag	gtt		384
Leu	His	Ser	Thr	Asn	Phe	Ser	Cys	Val	Leu	Val	Asp	Pro	Glu	Gln	Val		
		115					120					125					
gtc	cag	cgt	cac	gtc	gtc	ctg	gcc	cag									411
Val	Gln	Arg	His	Val	Val	Leu	Ala	Gln									
		130					135										

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gcatgcatc	atg acc atg aga	cac aac tgg aca	cca gac ctc agc cct ttg	111
	Met Thr Met Arg	His Asn Trp Thr	Pro Asp Leu Ser Pro Leu	
	1	5	10	
tgg gtc ctg ctc	ctg tgt gcc cac	gtc gtc act ctc	ctg gtc aga gcc	159
Trp Val Leu Leu	Leu Cys Ala His	Val Val Thr Leu	Leu Val Arg Ala	
15	20	25	30	
aca cct gtc tcg	cag acc acc aca	gct gcc act gcc	tca gtt aga agc	207
Thr Pro Val Ser	Gln Thr Thr Thr	Ala Ala Thr Ala	Ser Val Arg Ser	
	35	40	45	
aca aag gac				216
Thr Lys Asp				

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 Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val Val Gln Arg His Val
 1 5 10 15

gtc ctg gcc cag ctc tgg gct ggg ctg agg gca acc ttg ccc ccc acc 96
 Val Leu Ala Gln Leu Trp Ala Gly Leu Arg Ala Thr Leu Pro Pro Thr
 20 25 30

caa gaa gcc ctg ccc tcc agc cac agc agt cca cag cag cag ggt 141
 Gln Glu Ala Leu Pro Ser Ser His Ser Ser Pro Gln Gln Gln Gly
 35 40 45

taagactcag cacagggcca gcagcagcac aaccttgacc agagcttggg tcctacctgt 201
 ctacctggag tgaacagtcc ctgactgcct gta 234

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 ctctgtgtg cccacgtcgt cactctcctg gtcagagcc aca cct gtc tcg cag 174
 Thr Pro Val Ser Gln
 1 5

acc acc aca gct gcc act gcc tca gtt aga agc aca aag gac ccc tgc 222
 Thr Thr Thr Ala Ala Thr Ala Ser Val Arg Ser Thr Lys Asp Pro Cys
 10 15 20

ccc tcc cag ccc cca gtg ttc cca gca gct aag cag tgt cca gca ttg 270
 Pro Ser Gln Pro Pro Val Phe Pro Ala Ala Lys Gln Cys Pro Ala Leu
 25 30 35

gaa gtg acc tgg cca gag gtg gaa gtg cca ctg aat gga acg ctg agc 318
 Glu Val Thr Trp Pro Glu Val Glu Val Pro Leu Asn Gly Thr Leu Ser
 40 45 50

tta tcc tgt gtg gcc tgc agc cgc ttc ccc aac ttc agc atc ctc tac 366
 Leu Ser Cys Val Ala Cys Ser Arg Phe Pro Asn Phe Ser Ile Leu Tyr
 55 60 65

tgg ctg ggc aat ggt tcc ttc att gag cac ctc cca ggc cga ctg tgg 414
 Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu Pro Gly Arg Leu Trp
 70 75 80 85

gag ggg agc acc agc cgg gaa cgt ggg agc aca ggt acg cag ctg tgc 462
 Glu Gly Ser Thr Ser Arg Glu Arg Gly Ser Thr Gly Thr Gln Leu Cys

	90	95	100	
aag gcc ttg gtg ctg gag cag ctg acc cct gcc ctg cac agc acc aac				510
Lys Ala Leu Val Leu Glu Gln Leu Thr Pro Ala Leu His Ser Thr Asn				
	105	110	115	
ttc tcc tgt gtg ctc gtg gac cct gaa cag gtt gtc cag cgt cac gtc				558
Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val Val Gln Arg His Val				
	120	125	130	
gtc ctg gcc cag ctc tgg gct ggg ctg agg gca acc ttg ccc ccc acc				606
Val Leu Ala Gln Leu Trp Ala Gly Leu Arg Ala Thr Leu Pro Pro Thr				
	135	140	145	
caa gaa gcc ctg ccc tcc agc cac agc agt cca cag cag cag ggt				651
Gln Glu Ala Leu Pro Ser Ser His Ser Ser Pro Gln Gln Gln Gly				
	150	155	160	
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ctacctggag tgaacagtcct ctgactgcct gta				744
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Ala Val Pro Thr Lys Gln Tyr Pro Ala Leu Asp Val Ile Trp Pro Glu				
1 5 10 15				
aaa gaa gtg cca ctg aat gga act ctg acc ttg tcc tgt act gcc tgc				96
Lys Glu Val Pro Leu Asn Gly Thr Leu Thr Leu Ser Cys Thr Ala Cys				
	20	25	30	
agc cgc ttc ccc tac ttc agc atc ctc tac tgg ctg ggc aat ggt tcc				144
Ser Arg Phe Pro Tyr Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser				
	35	40	45	
ttc att gag cac ctt cca ggc cgg ctg aag gag ggc cac aca agt cgc				192
Phe Ile Glu His Leu Pro Gly Arg Leu Lys Glu Gly His Thr Ser Arg				
	50	55	60	
gag cac agg aac aca agc acc tgg ctg cac agg gcc ttg gtg ctg gaa				240
Glu His Arg Asn Thr Ser Thr Trp Leu His Arg Ala Leu Val Leu Glu				
	65	70	75	80
gaa ctg agc ccc acc cta cga agt acc aac ttc tcc tgt ttg ttt gtg				288
Glu Leu Ser Pro Thr Leu Arg Ser Thr Asn Phe Ser Cys Leu Phe Val				
	85	90	95	
gat cct gga caa gtg gcc cag tat cac atc att ctg gcc cag ctc tgg				336

Asp Pro Gly Gln Val Ala Gln Tyr His Ile Ile Leu Ala Gln Leu Trp
100 105 110

gat ggg ttg aag aca 351
Asp Gly Leu Lys Thr
115

<210> 39
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cacagacacc agacttgctt gcaagtcac atg acc atg aga cac tgc tgg aca 174
Met Thr Met Arg His Cys Trp Thr
1 5
gca ggc ccc agt tct tgg tgg gtc ctg ctt ttg tat gtc cat gtc att 222
Ala Gly Pro Ser Ser Trp Trp Val Leu Leu Leu Tyr Val His Val Ile
10 15 20
ttg gcc aga gcc aca tct gca cct cag aca act gcc act gtc tta act 270
Leu Ala Arg Ala Thr Ser Ala Pro Gln Thr Thr Ala Thr Val Leu Thr
25 30 35 40
gga agc tca aaa gac cca tgc tct tcc tgg tct cca gca gtc cca act 318
Gly Ser Ser Lys Asp Pro Cys Ser Ser Trp Ser Pro Ala Val Pro Thr
45 50 55
aag cag tac cca gca ctg 336
Lys Gln Tyr Pro Ala Leu
60

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<211> 253
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<213> Mus musculus

<220>
<221> CDS
<222> (1)..(135)

<400> 40
gat cct gga caa gtg gcc cag tat cac atc att ctg gcc cag ctc tgg 48
Asp Pro Gly Gln Val Ala Gln Tyr His Ile Ile Leu Ala Gln Leu Trp
1 5 10 15
gat ggg ttg aag aca gct ccg tcc cct tct caa gaa acc ctc tct agc 96

Asp Gly Leu Lys Thr Ala Pro Ser Pro Ser Gln Glu Thr Leu Ser Ser
20 25 30

cac agc cca gta tcc aga tca gca ggc cca ggg gtt gca taaagccaac 145
His Ser Pro Val Ser Arg Ser Ala Gly Pro Gly Val Ala
35 40 45

cacaccatga ccttgaccag agcctggctc tcacttacct ggagggtgga gtctacacca 205
taggctgtga ttgcctttct gctgctgaac ctcaaactca agcttcac 253

<210> 41 = 33 (coding)
<211> 847
<212> DNA
<213> Mus musculus

<220>
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<222> (235) .. (729)

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tgcccttccc agaaggaggc tggcaagctg gcaaacggac tgttgcttcc cagaggaagt 120
cacagacacc agacttgctt gcaagtcac atgaccatga gacactgctg gacagcaggc 180
cccagttctt ggtgggtcct gcttttgtat gtccatgtca ttttggccag agcc aca 237
Thr
1

tct gca cct cag aca act gcc act gtc tta act gga agc tca aaa gac 285
Ser Ala Pro Gln Thr Thr Ala Thr Val Leu Thr Gly Ser Ser Lys Asp
5 10 15

cca tgc tct tcc tgg tct cca gca gtc cca act aag cag tac cca gca 333
Pro Cys Ser Ser Trp Ser Pro Ala Val Pro Thr Lys Gln Tyr Pro Ala
20 25 30

ctg gat gtg att tgg cca gaa aaa gaa gtg cca ctg aat gga act ctg 381
Leu Asp Val Ile Trp Pro Glu Lys Glu Val Pro Leu Asn Gly Thr Leu
35 40 45

acc ttg tcc tgt act gcc tgc agc cgc ttc ccc tac ttc agc atc ctc 429
Thr Leu Ser Cys Thr Ala Cys Ser Arg Phe Pro Tyr Phe Ser Ile Leu
50 55 60 65

tac tgg ctg ggc aat ggt tcc ttc att gag cac ctt cca ggc cgg ctg 477
Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu Pro Gly Arg Leu
70 75 80

aag gag ggc cac aca agt cgc gag cac agg aac aca agc acc tgg ctg 525
Lys Glu Gly His Thr Ser Arg Glu His Arg Asn Thr Ser Thr Trp Leu
85 90 95

cac agg gcc ttg gtg ctg gaa gaa ctg agc ccc acc cta cga agt acc 573
His Arg Ala Leu Val Leu Glu Glu Leu Ser Pro Thr Leu Arg Ser Thr

100	105	110	
aac ttc tcc tgt ttg ttt gtg gat cct gga caa gtg gcc cag tat cac			621
Asn Phe Ser Cys Leu Phe Val Asp Pro Gly Gln Val Ala Gln Tyr His			
115	120	125	
atc att ctg gcc cag ctc tgg gat ggg ttg aag aca gct ccg tcc cct			669
Ile Ile Leu Ala Gln Leu Trp Asp Gly Leu Lys Thr Ala Pro Ser Pro			
130	135	140	145
tct caa gaa acc ctc tct agc cac agc cca gta tcc aga tca gca ggc			717
Ser Gln Glu Thr Leu Ser Ser His Ser Pro Val Ser Arg Ser Ala Gly			
150	155	160	
cca ggg gtt gca taaagccaac cacaccatga ccttgaccag agcctggctc			769
Pro Gly Val Ala			
165			
tcatctacct ggagggtgga gtctacacca taggctgtga ttgcctttct gctgctgaac			829
ctcaaaactca agcttcac			847
<210> 42			
<211> 137			
<212> PRT			
<213> Homo sapiens			
<400> 42			
Thr Pro Val Ser Gln Thr Thr Thr Ala Ala Thr Ala Ser Val Arg Ser			
1	5	10	15
Thr Lys Asp Pro Cys Pro Ser Gln Pro Pro Val Phe Pro Ala Ala Lys			
20	25	30	
Gln Cys Pro Ala Leu Glu Val Thr Trp Pro Glu Val Glu Val Pro Leu			
35	40	45	
Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys Ser Arg Phe Pro Asn			
50	55	60	
Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu			
65	70	75	80
Pro Gly Arg Leu Trp Glu Gly Ser Thr Ser Arg Glu Arg Gly Ser Thr			
85	90	95	
Gly Thr Gln Leu Cys Lys Ala Leu Val Leu Glu Gln Leu Thr Pro Ala			
100	105	110	
Leu His Ser Thr Asn Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val			
115	120	125	
Val Gln Arg His Val Val Leu Ala Gln			
130	135		

<210> 43
 <211> 49
 <212> PRT
 <213> Homo sapiens

<400> 43

Met Thr Met Arg His Asn Trp Thr Pro Asp Leu Ser Pro Leu Trp Val
 1 5 10 15
 Leu Leu Leu Cys Ala His Val Val Thr Leu Leu Val Arg Ala Thr Pro
 20 25 30
 Val Ser Gln Thr Thr Thr Ala Ala Thr Ala Ser Val Arg Ser Thr Lys
 35 40 45

Asp

<210> 44
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 44

Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val Val Gln Arg His Val
 1 5 10 15
 Val Leu Ala Gln Leu Trp Ala Gly Leu Arg Ala Thr Leu Pro Pro Thr
 20 25 30
 Gln Glu Ala Leu Pro Ser Ser His Ser Ser Pro Gln Gln Gln Gly
 35 40 45

<210> 45
 <211> 164
 <212> PRT
 <213> Homo sapiens

<400> 45

Thr Pro Val Ser Gln Thr Thr Thr Ala Ala Thr Ala Ser Val Arg Ser
 1 5 10 15
 Thr Lys Asp Pro Cys Pro Ser Gln Pro Pro Val Phe Pro Ala Ala Lys
 20 25 30
 Gln Cys Pro Ala Leu Glu Val Thr Trp Pro Glu Val Glu Val Pro Leu
 35 40 45
 Asn Gly Thr Leu Ser Leu Ser Cys Val Ala Cys Ser Arg Phe Pro Asn
 50 55 60
 Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu
 65 70 75 80

Pro Gly Arg Leu Trp Glu Gly Ser Thr Ser Arg Glu Arg Gly Ser Thr
85 90 95

Gly Thr Gln Leu Cys Lys Ala Leu Val Leu Glu Gln Leu Thr Pro Ala
100 105 110

Leu His Ser Thr Asn Phe Ser Cys Val Leu Val Asp Pro Glu Gln Val
115 120 125

Val Gln Arg His Val Val Leu Ala Gln Leu Trp Ala Gly Leu Arg Ala
130 135 140

Thr Leu Pro Pro Thr Gln Glu Ala Leu Pro Ser Ser His Ser Ser Pro
145 150 155 160

Gln Gln Gln Gly

<210> 46
<211> 117
<212> PRT
<213> Mus musculus

<400> 46

Ala Val Pro Thr Lys Gln Tyr Pro Ala Leu Asp Val Ile Trp Pro Glu
1 5 10 15

Lys Glu Val Pro Leu Asn Gly Thr Leu Thr Leu Ser Cys Thr Ala Cys
20 25 30

Ser Arg Phe Pro Tyr Phe Ser Ile Leu Tyr Trp Leu Gly Asn Gly Ser
35 40 45

Phe Ile Glu His Leu Pro Gly Arg Leu Lys Glu Gly His Thr Ser Arg
50 55 60

Glu His Arg Asn Thr Ser Thr Trp Leu His Arg Ala Leu Val Leu Glu
65 70 75 80

Glu Leu Ser Pro Thr Leu Arg Ser Thr Asn Phe Ser Cys Leu Phe Val
85 90 95

Asp Pro Gly Gln Val Ala Gln Tyr His Ile Ile Leu Ala Gln Leu Trp
100 105 110

Asp Gly Leu Lys Thr
115

<210> 47
<211> 62
<212> PRT
<213> Mus musculus

<400> 47

Met Thr Met Arg His Cys Trp Thr Ala Gly Pro Ser Ser Trp Trp Val
 1 5 10 15
 Leu Leu Leu Tyr Val His Val Ile Leu Ala Arg Ala Thr Ser Ala Pro
 20 25 30
 Gln Thr Thr Ala Thr Val Leu Thr Gly Ser Ser Lys Asp Pro Cys Ser
 35 40 45
 Ser Trp Ser Pro Ala Val Pro Thr Lys Gln Tyr Pro Ala Leu
 50 55 60

<210> 48
 <211> 45
 <212> PRT
 <213> Mus musculus

<400> 48

Asp Pro Gly Gln Val Ala Gln Tyr His Ile Ile Leu Ala Gln Leu Trp
 1 5 10 15
 Asp Gly Leu Lys Thr Ala Pro Ser Pro Ser Gln Glu Thr Leu Ser Ser
 20 25 30
 His Ser Pro Val Ser Arg Ser Ala Gly Pro Gly Val Ala
 35 40 45

<210> 49
 <211> 165
 <212> PRT
 <213> Mus musculus

<400> 49

Thr Ser Ala Pro Gln Thr Thr Ala Thr Val Leu Thr Gly Ser Ser Lys
 1 5 10 15
 Asp Pro Cys Ser Ser Trp Ser Pro Ala Val Pro Thr Lys Gln Tyr Pro
 20 25 30
 Ala Leu Asp Val Ile Trp Pro Glu Lys Glu Val Pro Leu Asn Gly Thr
 35 40 45
 Leu Thr Leu Ser Cys Thr Ala Cys Ser Arg Phe Pro Tyr Phe Ser Ile
 50 55 60
 Leu Tyr Trp Leu Gly Asn Gly Ser Phe Ile Glu His Leu Pro Gly Arg
 65 70 75 80
 Leu Lys Glu Gly His Thr Ser Arg Glu His Arg Asn Thr Ser Thr Trp
 85 90 95
 Leu His Arg Ala Leu Val Leu Glu Glu Leu Ser Pro Thr Leu Arg Ser
 100 105 110

Thr Asn Phe Ser Cys Leu Phe Val Asp Pro Gly Gln Val Ala Gln Tyr
 115 120 125

His Ile Ile Leu Ala Gln Leu Trp Asp Gly Leu Lys Thr Ala Pro Ser
 130 135 140

Pro Ser Gln Glu Thr Leu Ser Ser His Ser Pro Val Ser Arg Ser Ala
 145 150 155 160

Gly Pro Gly Val Ala
 165

<210> 50
 <211> 21
 <212> DNA
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<220>
 <223> Synthetic

<400> 50
 tgtgtgactg gagaagagga c

21

<210> 51
 <211> 29
 <212> DNA
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<220>
 <223> Synthetic

<400> 51
 tacaggcagt cagggactgt tcaactccag

29

<210> 52
 <211> 14
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic

<400> 52

Ala Cys Asn Cys Cys Asn Gly Thr Asn Trp Ser Asn Cys Ala
 1 5 10

<210> 53
 <211> 17
 <212> PRT
 <213> Artificial

<220>
 <223> Synthetic

<400> 53

Thr Gly Asn Gly Cys Asn Ala Arg Asn Ala Cys Asn Ala Cys Arg Thr
1 5 10 15

Gly

<210> 54
<211> 14
<212> PRT
<213> Artificial

<220>
<223> Synthetic

<400> 54

Gly Gly Arg Cys Ala Asn Gly Gly Arg Thr Cys Tyr Thr Thr
1 5 10

<210> 55
<211> 21
<212> DNA
<213> Artificial

<220>
<223> Synthetic

<400> 55
ggtcacttcc aatgctggac a

21

<210> 56
<211> 36
<212> PRT
<213> Artificial

<220>
<223> Synthetic

<400> 56

Gly Gly Cys Cys Ala Cys Gly Cys Gly Thr Cys Gly Ala Cys Thr Ala
1 5 10 15

Gly Thr Ala Cys Gly Gly Gly Ile Ile Gly Gly Gly Ile Ile Gly Gly
20 25 30

Gly Ile Ile Gly
35

<210> 57
<211> 21
<212> DNA
<213> Artificial

<220>
 <223> Synthetic
 <400> 57
 gtcctttgtg cttctaactg a 21

<210> 58
 <211> 35
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic
 <400> 58
 gactcgagtc gacatcgatt tttttttttt ttttt 35

<210> 59
 <211> 20
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic
 <400> 59
 ttctcctgtg tgctcgtgga 20

<210> 60
 <211> 17
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic
 <400> 60
 gactcgagtc gacatcg 17

<210> 61
 <211> 30
 <212> DNA
 <213> Artificial

<220>
 <223> Synthetic
 <400> 61
 ctcgaggcca ccatgaccat gagacacaac 30

<210> 62
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09786130.030101

<213> Artificial

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<400> 62

gcggccgctc attagtgatg gtgatggtga tgaccctgct gctgtggact

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<222> (9)

<223> n is unknown

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<222> (12)

<223> n is unknown

<400> 63

gcngtnccna cnaa

14

<210> 64

<211> 14

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<213> Artificial

<220>

<223> Synthetic

<220>

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<222> (6)

<223> n is unknown

<220>

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<222> (9)
<223> n is unknown

<400> 64
gtyttnarnc crtc

14

<210> 65
<211> 17
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<220>
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<223> n is unknown

<400> 65
swncrttgnc cytcytt

17

<210> 66
<211> 21
<212> DNA
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<220>
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<400> 66
tgcaggcagt acaggacaag g

21

<210> 67
<211> 21
<212> DNA
<213> Artificial

<220>
<223> Synthetic

<400> 67
gtgctgggta ctgcttagtt g

21

<210> 68
<211> 18
<212> DNA

<213> Artificial

<220>

<223> Synthetic

<400> 68

gatcctggac aagtggcc

18

<210> 69

<211> 20

<212> DNA

<213> Artificial

<220>

<223> Synthetic

<400> 69

ctgagcctta gagctccaag

20

<210> 70

<211> 22

<212> DNA

<213> Artificial

<220>

<223> Synthetic

<400> 70

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<220>

<223> Synthetic

<400> 71

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30

<210> 72

<211> 50

<212> DNA

<213> Artificial

<220>

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<400> 72

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50

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TOTAL "DET98/60"